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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,563	11/26/2003	Charles E. Seeney	9701-002	1254
28840 7	590 05/02/2006		EXAMINER	
TOMLINSON & O'CONNELL, P.C.			LE, HOA T	
TWO LEADEI	RSHIP SQUARE			
211 NORTH ROBINSON, SUITE 450			ART UNIT	PAPER NUMBER
OKLAHOMA CITY, OK 73102			1773	

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/724,563	SEENEY ET AL.			
Office Action Summary	Examiner	Art Unit			
	H. T. Le	1773			
 The MAILING DATE of this communication app Period for Reply 	pears on the cover sheet with the o	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D. Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 19 D	<u>ecember 2005</u> .				
) ☐ This action is FINAL . 2b) ☐ This action is non-final.					
3) Since this application is in condition for alloward closed in accordance with the practice under E					
Disposition of Claims	•				
4)⊠ Claim(s) <u>45-71</u> is/are pending in the application	n.				
4a) Of the above claim(s) <u>15-55 and 67-71</u> is/a					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>56-66</u> is/are rejected.					
7) ☐ Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	r election requirement.				
Application Papers	·				
9)☐ The specification is objected to by the Examine					
10) The drawing(s) filed on is/are: a) acc					
Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)-(d) or (f).			
1. Certified copies of the priority document	s have been received.				
2. Certified copies of the priority document	s have been received in Applicati	on No			
3. Copies of the certified copies of the prior	rity documents have been receive	ed in this National Stage			
application from the International Bureau	u (PCT Rule 17.2(a)).				
* See the attached detailed Office action for a list	of the certified copies not receive	:d.			
Attachment(s)	_				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D				
 Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 	5) 🔲 Notice of Informal F	Patent Application (PTO-152)			
Paper No(s)/Mail Date	6)				

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DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

- 2. The examiner hereby acknowledges that claims 56-66 were classified under the same group with the elected (now canceled) claims 1-44 during the phone conversation when Applicant's Representative made the election. Thus, the election-restriction portion of the last office action is disregarded, and claims 56-66 are treated as elected claims.
- 3. Claims 45-55 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention. Election was made without traverse.

Response to Arguments

4. Claims 60 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite as applied to the rejection to claims 8, 11, 14, 18, and 21 set forth in the last office action.

It is unclear what is meant by "erodable" polymer. Does it mean decomposable? All organic polymers are decomposable. The specification appears to suggest the term "bio-erodable". Amending "erodable" to "bio-erodable" would obvious this rejection.

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5. Claims 56-66 are rejected under 35 U.S.C. 102(a) being anticipated by pioneers in the art as disclosed by Pankhurst et al. and/or Tartaj et al as applied to the rejection to claims 1-44 set forth in the last office action and further discussed below.

- 6. Claims 56-66 are rejected under 35 U.S.C. 102(a) as being anticipated by either Wilhelm et al as applied to the rejection to claims 1-4, 14, 23, 24 and 37 set forth in the last office action and further discussed below.
- 7. Applicant argues that "Pankhurst discusses nanoparticles having a biocompatible shell of silica and a functional group attached to the shell... Pankhurst does not, however, disclose a nanosphere having a plurality of magnetically responsive nanoparticles and a biocompatible shell prepared by atomization and drying the resulting aerosol in a heated chamber." With regard to the nanoparticles, the nanoparticles are disclosed as magnetic, thus they are magnetically responsive. The independent claim 56 requires only the presence of magnetically responsive nanoparticles and bio-compatible shell. The coated nanoparticle taught by Pankhurst qualifies as the claimed nanosphere because all elements claimed are met. With regard to the process limitations, claims 56-66 are product claims, thus process limitations are not given any patentable weight. The burden is on applicant to show that the particular process steps as recited in the claims produce a product different from the product taught in the Pankhurst article.
- 8. Applicant argues that the Tartaj does not teach the claimed invention because Tartaj discloses an aerosol method of producing hollow spheres having a shell formed from small crystallites. It's unclear which article Applicant refers to in the argument because at page

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R183, third full paragraph, Tartaj specifically states that "for in vivo applications, the magnetic particles must be coated with a biocompatible polymer during or after the synthesis process to prevent the formation of the large aggregates". This passage clearly discloses magnetic particles coated with a biocompatible polymer (and the magnetic particles are nanoparticles. The independent claim 56 requires only the presence of magnetically responsive nanoparticles and bio-compatible shell. The coated nanoparticle taught by Tartaj qualifies as the claimed nanosphere because all elements claimed are met. With regard to the process limitations, claims 56-66 are product claims, thus process limitations are not given any patentable weight. The burden is on applicant to show that the particular process steps as recited in the claims produce a product different from the product taught in the Tartaj article.

- 9. Applicant argues that Wilhelm does not anticipate Applicant's independent claim 56. Wilhelm teaches a magnetite nanoparticle that is coated with albumin. Albumin is a biological material and thus is biocompatible. The independent claim 56 requires only the presence of magnetically responsive nanoparticles and bio-compatible shell. The coated nanoparticle taught by Wilhelm qualifies as the claimed nanosphere because all elements claimed are met.
- 10. Applicant's arguments filed December 13, 2005 have been fully considered but they are not persuasive for reasons set forth above.

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Conclusion

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. T. Le whose telephone number is 571-272-1511. The examiner can normally be reached on 10:00 a.m. to 6:30 p.m., Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

H. T. Le

Primary Examiner
Art Unit 1773

April 27, 2006